

Claims

- [c1] A method for configuring a system having a plurality of processors to provide the system with at least one cluster of processors, each cluster having one service point, the method comprising the steps of:
- computing a distance from each processor to other processors in the system;
 - computing a plurality of total distances, where each total distance is associated with one processor;
 - determining a minimum total distance from the plurality of total distances; and
 - assigning as the service point the processor having the minimum total distance associated therewith.
- [c2] A method according to claim 1, further comprising the step of partitioning the system into a plurality of clusters.
- [c3] A method according to claim 2, wherein said partitioning further comprises:
- sorting the processors in accordance with the total distance associated with each processor;
 - assigning each processor to one of two clusters;
 - determining a minimum total distance for the processors

in each cluster in accordance with the plurality of total distances associated with the processors in said cluster;
and
assigning as the service point for each cluster the processor having the minimum total distance associated therewith in said cluster.

[c4] 4.mA od according to claim 3, further comprising the steps of:
subdividing one of said two clusters into two subdivided clusters, thereby partitioning the system into three clusters;
determining a minimum total distance for the processors in each of said three clusters in accordance with the plurality of total distances associated with the processors in said three clusters;
assigning the processors to said three clusters in accordance with the minimum total distance; and
assigning as the service point for each of said three clusters the processor having the minimum total distance associated therewith in said cluster.

[c5] 5.meA od according to claim 1, wherein the processors are of different types, and the processors are assigned to clusters in accordance therewith.

[c6] 6.meA od according to claim 1, wherein said configuring

is performed dynamically when a processor is added to the system.

[c7] 7.meA d according to claim 1, wherein said configuring is performed dynamically when a processor is removed from the system.

[c8] 8.ethA m according to claim 7, wherein the partitioning of the system is dynamically changed when a processor is removed from the system.

[c9] 9. ethA m according to claim 1, further comprising the step of assigning another processor as a backup service point.

[c10] 10.mpuA computable storage medium having stored therein instructions for performing a method for configuring a system having a plurality of processors to provide the system with at least one cluster of processors, each cluster having one service point, the method comprising the steps of:
computing a distance from each processor to other processors in the system;
computing a plurality of total distances, where each total distance is associated with one processor;
determining a minimum total distance from the plurality of total distances; and

assigning as the service point the processor having the minimum total distance associated therewith.